COUNTY OF
1781 1781
GREENSVILLE
◆ V I R G I N I A ◆
... Growing Towards New Horizons

THE GREENSVILLE COUNTY WATER AND SEWER AUTHORITY

April 15, 2013

Ms Tamira Cohen, Ph D
Environmental Specialist, Sr
VDEQ
Piedmont Regional Office
4949A Cox Road
Glen Allen, Virginia 23060

Re VPDES Permit No VA0028916, Greensville County-Skippers WWTF
Revised Permit Renewal application

Dear Ms Cohen

Please find included one original and one copy of revised pages of EPA Forms 2A, the VPDES Permit Application Addendum, and Attachment A-Water Quality Criteria Monitoring form as noted in your e-mail dated Monday April 8, 2013

The VPDES Permit Application Addendum Item 9 request the approval dates of the O&M Manual and Solids Management Plan I have not been able to locate the approval date for the O&M Manual, the date on our copy states that it was revised February 2008 which would have been after the last permit renewal I have also not been able to locate a copy of the Sludge Management Plan for this plant It should have been done shortly after we accepted the ownership of the facility in December 1999 Please find attached to the VPDES Permit Application Addendum a plan for the solids and sludge that are removed from the Skippers facility and transported to the Three Creek WWTF for further treatment and disposal

If additional information is needed please contact me at 434-348-4245

Thank You

James Warf, Supt of Public Utilities
GCWSA

org. Revised

VPDES Permit Application Addendum 4/12/13 DLW

1 **Entity to whom the permit is to be issued** Greensville County Water and Sewer Authority

Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner

2 **Is this facility located within city or town boundaries?** Yes ☐ No ☒

3 **Provide the tax map parcel number for the land where the discharge is located.** 44-62B

4 **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** 0

5 **What is the design average effluent flow of this facility?** 036 DLW MGD

For industrial facilities, provide the max. 30-day average production level, include units:

NA

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Yes ☐ No ☒

If "Yes", please identify the other flow tiers (in MGD) or production levels

Please consider the following questions for both the flow tiers and the production levels (if applicable) Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6 **Nature of operations generating wastewater**

Domestic Waste From Truck Plaza, Motel

100 % of flow from domestic

Number of private residences to be served by the treatment works 0

0 % of flow from non-domestic connections/sources

7 **Mode of discharge** ☒ Continuous ☐ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges

8 **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

X Permanent stream, never dry

____ Intermittent stream, usually flowing, sometimes dry

____ Ephemeral stream, wet-weather flow, often dry

____ Effluent-dependent stream, usually or always dry without effluent flow

____ Lake or pond at or below the discharge point

____ Other.

9 **Approval Date(s)** DLW DLW

O & M Manual Revised Feb 2008 **Sludge/Solids Management Plan** See Attached

Have there been any changes in your operations or procedures since the above approval dates? Yes ☐ No ☒

GREENSVILLE COUNTY- SKIPPERS WWTF Permit # VA0028916

Sludge/Solids Management Plan April 15, 2013

Sludge is collected from the clarifiers and stored in the plant digester The sludge is removed from the digester and periodically loaded in an approved hauling truck and delivered to the Three Creek WWTF located at 428 Moonlight Road where it is offloaded into a manhole just upstream of the pretreatment bar screen and grit chamber The sludge is mixed with the influent of the plant and processed with the plant waste

It is then digested along with the sludge from the process, dried and delivered to the County landfill

Revised
4/12/13
gdw

FACILITY NAME AND PERMIT NUMBER
Greensville County - Skippers WWTF VA0028916

Form Approved 1/14/99
OMB Number 2040-0086

A 5 Indian Country

a Is the treatment works located in Indian Country?

_____ Yes ✓ No

b Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

_____ Yes ✓ No

A 6 Flow Indicate the design flow rate of the treatment plant (i e , the wastewater flow rate that the plant was built to handle) Also provide the average daily flow rate and maximum daily flow rate for each of the last three years Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal

a Design flow rate 0.036 mgd
2/w

	Two Years Ago	Last Year	This Year	
b Annual average daily flow rate	0 01	0 01	0 01	mgd
c Maximum daily flow rate	0.03	0.03	0.036 2/w	mgd

A 7 Collection System Indicate the type(s) of collection system(s) used by the treatment plant Check all that apply Also estimate the percent contribution (by miles) of each

✓ Separate sanitary sewer	100 00 %
_____ Combined storm and sanitary sewer	_____ %

A 8 Discharges and Other Disposal Methods

a Does the treatment works discharge effluent to waters of the U S ? ✓ Yes _____ No

If yes, list how many of each of the following types of discharge points the treatment works uses

i Discharges of treated effluent	1
ii Discharges of untreated or partially treated effluent	NA
iii Combined sewer overflow points	NA
iv Constructed emergency overflows (prior to the headworks)	NA
v Other _____	NA

b Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U S ? _____ Yes ✓ No

If yes, provide the following for each surface impoundment

Location _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

c Does the treatment works land-apply treated wastewater? _____ Yes ✓ No

If yes, provide the following for each land application site

Location _____

Number of acres _____

Annual average daily volume applied to site _____ Mgd

Is land application _____ continuous or _____ intermittent?

d Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? _____ Yes ✓ No

Revised 4/12/13 DFW

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WASTEWATER DISCHARGES

If you answered "yes" to question A 8 a, complete questions A 9 through A 12 once for each outfall (including bypass points) through which effluent is discharged Do not include information on combined sewer overflows in this section If you answered "no" to question A 8 a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0 1 mgd "

A 9 Description of Outfall

a Outfall number 001

b Location

(City or town, if applicable)	(Zip Code)
Greensville	Virginia
(County)	(State)
36-35'-40 88N	77-34'-18 78W
(Latitude)	(Longitude)

c Distance from shore (if applicable) N/A ft DNR

d Depth below surface (if applicable) N/A ft DNR

e Average daily flow rate N/A mgd DNR

f Does this outfall have either an intermittent or a periodic discharge? ____ Yes ✓ No (go to A 9 g)

If yes, provide the following information

Number of times per year discharge occurs ____

Average duration of each discharge ____

Average flow per discharge ____ mgd

Months in which discharge occurs ____

g Is outfall equipped with a diffuser? ____ Yes ✓ No

A 10 Description of Receiving Waters

a Name of receiving water Fountain Creek

b Name of watershed (if known) Chowan

United States Soil Conservation Service 14-digit watershed code (if known) ____

c Name of State Management/River Basin (if known) ____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known) ____

d Critical low flow of receiving stream (if applicable)
acute N/A cfs DNR chronic N/A cfs DNR

e Total hardness of receiving stream at critical low flow (if applicable) N/A mg/l of $CaCO_3$
DNR.

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FACILITY NAME AND PERMIT NUMBER
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A 11 Description of Treatment

a What levels of treatment are provided? Check all that apply

_____ Primary ✓ Secondary

_____ Advanced _____ Other Describe _____

b Indicate the following removal rates (as applicable)

Design BOD_5 removal or Design $CBOD_5$ removal	85 00	%
Design SS removal	80 00	%
Design P removal	0 00	%
Design N removal	0 00	%
Other _____	0 00	%

c What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe

Sodium Hyprochlorite

If disinfection is by chlorination, is dechlorination used for this outfall? ✓ Yes _____ No

d Does the treatment plant have post aeration? ✓ Yes _____ No

A 12 Effluent Testing Information **All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged Do not include information on combined sewer overflows in this section All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136 At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart**

Outfall number 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6 90	s u			
pH (Maximum)	7 90	s u			
Flow Rate	0 02	mgd	0 01	mgd	3 00
Temperature (Winter)	67 00 JDW	Ferenheit	36 00	Ferenheit	3 00
Temperature (Summer)	105 00 JDW	Ferenheit	86 00	Ferenheit	3 00

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc	Units	Conc	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS								
BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	7 00	mg/l	6 60	mg/l	3 00	5210 B	2
	CBOD-5							
FECAL COLIFORM		0 00	mg/l	0 00	mg/l	3 00	9221C+E	2
TOTAL SUSPENDED SOLIDS (TSS)		7 00	mg/l	4 00	mg/l	3 00	2540D	1 o

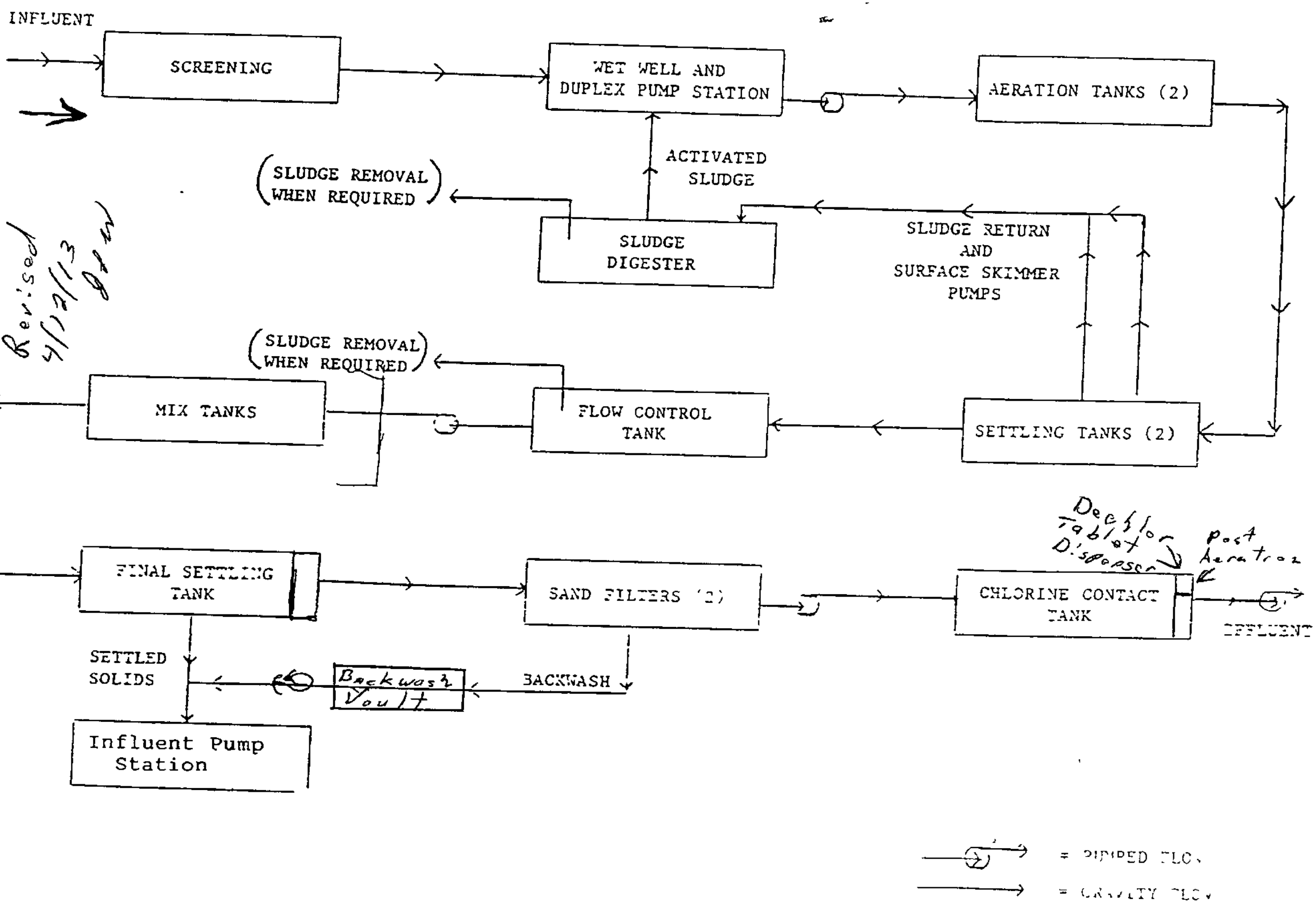
END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

EPA Form 2A, part B, B, 3

ATTACHMENT C

Revised 4/12/13 JLW

TERTIARY TREATMENT FLOW DIAGRAM



ATTACHMENT D

Form 2A Part B Item B 5 a Scheduled Improvements and Schedules of Implementation

We are in the process of replacing the original duplex influent pump station with a new station Are also adding telescopic valves to the settling tanks to allow us to return the sludge from these tanks thru the pump station and send it back to the aeration tanks The intention of this upgrade is to assist in better treatment of the wastewater and provide a better quality discharge

With the addition of a second travel plaza discharging to this plant we wanted to be pro active in our treatment of the wastewater The changes do not increase the capacity of the plant
Please refer to CTC PTLog No 25107 (DEQ approved 12/10/2010)

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4/12/13
JJW

CASRN#	CHEMICAL	EPA ANALYSIS NO	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
ACID EXTRACTABLES (6)						
95-57-8	2-Chlorophenol	625	5ug/l	<5ug/l	G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	5ug/l	<5ug/l	G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	5ug/l	<5ug/l	G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	625	20ug/l	<20ug/l	G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol 4,6 Dinitro-o-cresol	625	5ug/l	<5ug/l	G or C	1/5 YR
25154-52-3	Nonylphenol	D7065-06	5ug/l	<5ug/l	G or C	1/5 YR
87-86-5	Pentachlorophenol	625	10ug/l	<10ug/l	G or C	1/5 YR
108-95-2	Phenol	625	5ug/l	<5ug/l	G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	5ug/l	<5ug/l	G or C	1/5 YR
MISCELLANEOUS						
776-41-7	Ammonia as NH3-N	4500NH3D	0 10MG/L	42 9MG/L	C	1/5 YR
16887-00-6	Chlorides	4500Cl C	1MG/L	145MG/L	C	1/5 YR (FW and PWS)
7782-50-5	Chlorine, Total Residual	4500Cl C	1 MG/L	<0 10 Mg/l	G	1/5 YR
57-12-5	Cyanide, Free	ASTM D 4282	10 0	<10 ug/L	G	1/5 YR
94-75-7	2,4 Dichlorophenoxy acetic acid (synonym = 2,4-D)	(4)	(5)	Not Required	G or C	1/5 YR (PWS)
1746-01-6	Dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin) (ppq)	1613	0 00001	Not Required	G or C	1/5 YR [Paper Mills & Oil Refineries]
N/A	*E coli* / *Enterococcus* (N/CML)	Colilert	1 mpn/100ml	0 mpn/100ml	G	1/5 YR
N/A	Foaming Agents (as MBAS)	(4)	(5)	Not Required	G	1/5 YR (PWS)
18496-25-8	Dissolved Sulfide	4500-S2 F	0 2MG/L	<0 2MG/L	G	1/5 YR
14797-55-8	Nitrate as N (mg/L)	(4)	(5)	Not Required	C	1/5 YR (PWS)
N/A	Sulfate (mg/L)	(4)	(5)	Not Required	C	1/5 YR (PWS)
N/A	Total Dissolved Solids (mg/L)	(4)	(5)	Not Required	C	1/5 YR (PWS)
60-10-5	Tributyltin [7]	NBSIR 85-329	0 03ug/l	<0 03ug/l	G or C	1/5 YR
93-72-1	2-(2,4,5-Trichlorophenoxy) propionic acid (synonym = Silvex)	(4)	(5)	Not Required	G or C	1/5 YR (PWS)
471-34-1	Hardness (mg/L as $CaCO_3$)	2340B	0 331mg/l	149mg/l	G or C (10)	1/5 YR